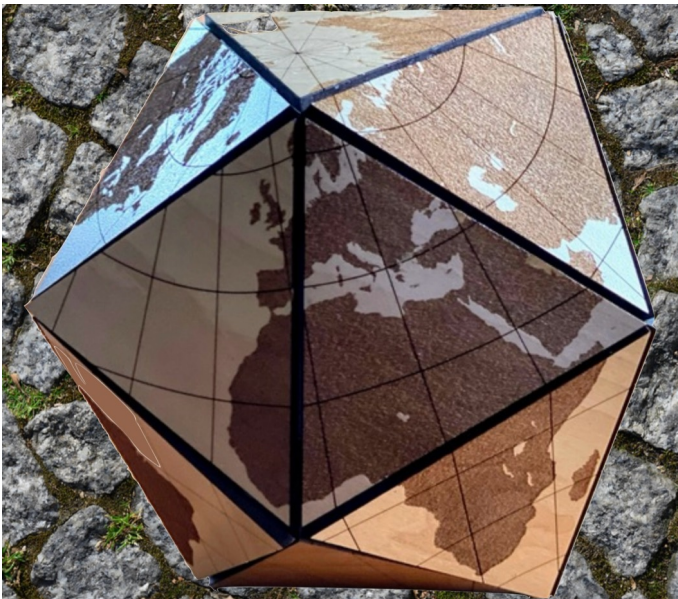


**Box 1**—Buckminster Fuller's Dymaxion map is a map of the Earth in a projection featuring the entire compound land-mass as a single mountain-chain, in which there are no cardinal directions N-S-E-W but instead a geodesic grid of triangles allowing the map to work as a model as it is mounted into a 3D polyhedron: icosahedron (20 faced polyhedron). So, we are moving our attention from a world map contained in a space, to a relation between an Earth portrait and a grid, that makes the map operate as model in that space.

Perhaps we can define the *trim-tab* as a functional element of a model? That is: as a functional steering element in a *hyper-dimensional rotation* (2D to 3D in a paper-model, from 4D to 5D in digital usership). To MA-students, getting to the point where their projects go from a *virtual* to an *actual* mode can take a major effort. And our question here is if *modelling* (in a wider sense than the narrow sense explored here) might facilitate their work to get across that threshold. The idea is that models function as *trim-tabs* in the hyper-dimensional rotation from *narrative* to *scenario*.

Premises: the *trim-tab*, celebrated by Buckminster Fuller, defines as a miniature version of a larger steering function (like a rudder on a ship, or a flap on a plane-wing); and the manoeuvre of the larger function becomes greatly eased by the smaller function. Here the virtue of the model does its resemblance to the larger element, but in its ability to tip the larger function with an aid that tops it. Which is why it is called a trim-tab: it works like tab that trims the larger function. A different idea of a model: that is, an active model that monitors *and* manages in a certain realm of *steering*.

It provides a framework for modelling based on what the model *does* (often despite appearances): the model resembles what it models in aspects that are the same, similar, different and other. Its function is to top the larger function with an effect which exceeds its *size*. Which in turn is instrumental to the interception of the *size* of what it controls. When the model starts operating as a trim-tab, it operates dimensionally: that is, facilitates manoeuvring *between* dimensions. The assisted control of *power steering* (whether it is electric, hydraulic or electronic) is a case in point: a *trim-tab*.



**Box 2**—Here, the same map is mounted into a *icosahedron* (polyhedron with 20 faces): here the geodesic grid is held by the map of the earth. The cobble-stones alludes to the pavement outside the school's (KHIO) reception. The trim-tab of the hyper-dimensional rotation moving from 2D to 3D—as we move from the class-room in Box 1 to the outside world—is human being. It exemplifies what Buckminster Fuller meant with his statement "call me trim-tab". Which is also the epitaph inscribed on a tomb-stone, made up to two components, in his honour.

The relevance of expanding from Bucky's rudders and flaps, does not only follow from the techno-logical development after his heyday. But it is also necessary if we want to include hand-held mobile digital control and display units: *mobiles* and *tablets*, mainly. That is, if we are concerned with their dual definition *in one* as **a)** control and display units ( $S_1$ ); **b)** functional trim-tab models ( $S_2$ ). That is, appearing to work on themselves; but are revealed to be discrete as soon as their operational domains are articulated in detail: e.g. the domains defined by digital usership and the domain defined as we dock a tablet in a *learning theatre* (at KHIO).

If we conceive the mobile control and display unit as a trim-tab, the hyper-dimensional rotation that it assists, harnesses the larger domain of digital *usership* ( $S_1$ )—whatever distributive and operative intelligence is monitored and managed by that means—to

the downsized *and* local manoeuvres of the learning theatre ( $S_2$ ). This is a way of expounding how the smaller may act as a host of the larger: not by some abstract group-theoretic principle, but by the physical principle of models as *meta*-machines integrated into machines. Power steering models steering *and* articulates a location of its own, as integrated within the larger machine.

It is by this general principle that the model works as a trim-tab; and by this very function also gauges the size of what it controls: that is, the bigger size. At first, in comparative terms: what is controlled is bigger *than* the control (which iterates the basic principle of the lever and its fulcrum). A dynamic and defining relation between bigger and smaller. In the case of digital usership, this comes out in extension of the *location*: while the extended usership is dislocated, the modelling function of the learning theatre is located. It accordingly allows to gauge what exceeds location.

That is, 'bigger than located' as the predicate of size in digital usership. It is extremely important to get this right. Location is connected to maps evidently. Historical accounts, however, are often trans-local. In the Kantian tradition of geography, we will readily imagine maps of locations as history-minus-time: that history fundamentally exceeds geography. Here, I should like to explore another possibility: namely, that historical narrative features a tendency towards *dislocation* that is inherent in 4D. While a new cartography comes on the horizon when location is conceived as 5D.

Here, *location* is understood as the ultimate categorising scenario: not *time* and not *space*. That location is the *material memory* of life on Planet Earth. A *terrestrial* memory, in Bruno Latour's terminology. Of course, we know that we are doing our best to destroy this memory, through the variety and extent of *corporate* action that sets exploitation *over* exploration: what we, with a *misnomer*, call the anthropocene. It would be adequate if we took control of this development. But since we are not—and are left alternately blind and paralysed—it is better called the [capitalocene](#).

But what presently concerns us is the availability of display-and-control units in our *proximal* zone: that is, *between* the intimate *and* the remote. Whether/not we manage to transform them into trim-tabs: that is, making them work as *local* devices (not only locating devices). The kind of work we may need to do, in order to make this happen, is precisely cartographic; with an understanding of the proximal as neither human-centric nor lost in space. It is both, or neither/nor: it is proximal. Which means that it *cannot* be conflated with the location, but is methodologically *close* to it.

The notion that modelling the *location*—through e.g. Buckminster Fuller's cartographic project—is a *trim-tab* of location is a *big* idea. Because it could mean that we have a way of working that intervenes critically/productively with the robbery of place which is currently going on. Because it means that we have the possibility to weave ourselves into the fabric of terrestrial memory, where we presently have been evacuated. It is likely a area of foundation study with a real potential to turn the tide. Realising that every each one of us is—like Bucky Fuller—has the potential and option to be a trim-tab.



**Box 3**—an example which with a maximum of simplicity displays the elements of a rudder in which the trim-tab **a**) is a miniature model of the rudder; **b**) is integrated into the rudder, greatly facilitating the operation of the large rudder; **c**) the operation of which allows to gauge a relation between *big* and *small* [i.e. size]; **d**) featuring the the principle of a *hyper-dimensional rotation*, whereby the large becomes a held by the small [as the smaller element articulates in the dimensional interstice].

If the new badly needed cartography *cannot* be conceived as history minus time, but instead comes through as history *minus minus* time, it links history and cartography dimensionally: where an *anaptúxis* emerges from the inter-dimensional come-and-go between 4D and 5D, that we can model and approximate with the come and go between 2D and 3D. That is, *up to a point*: beyond that, we will have to find our own way. Using the *logbook* as a model-workshop.